

## **CLAIMS**

What is claimed is :

- 5    1. An auto cycled pipeline system, comprising :
  - a plurality of main pipes arranged in parallel, one side of said plurality of main pipes connecting to an inlet pipe and the other side connecting to an exit pipe, and each said main pipe has a check valve ;
  - a plurality of cycle pipes, one side of each said cycle pipe connecting to a foregoing joint in front of said check valve and the other side of each said cycle pipe connecting to a rearward joint behind said check valve of each said main pipe ; and
  - a plurality of control valves, each said control valve attaching on each said cycle pipe.
- 15    2. The auto cycled pipeline system according to claim 1, wherein said plurality of cycle pipes are used to cycle a liquid.
- 20    3. The auto cycled pipeline system according to claim 1, wherein said plurality of cycle pipes are used to cycle a gas.
4. The auto cycled pipeline system according to claim 1, further comprising to attach a pump on each said main pipe, used to pump said liquid or said gas.
- 25    5. The auto cycled pipeline system according to claim 4, further

comprising to attach said pump between said foregoing joint and said rearward joint.

6. The auto cycled pipeline system according to claim 1, further  
5 comprising when one of said plurality main pipes stop pumping, open  
said control value.

7. The auto cycled pipeline system according to claim 1, further  
comprising when one of said plurality main pipes start pumping, close  
10 said control value.

8. An auto cycled ultra pure water supply pipeline system, comprising :

15 a plurality of main pipes arranged in parallel, one side of said plurality of main pipes connecting to an inlet pipe and the other side  
connecting to an exit pipe, and each said main pipe has an inlet value, a  
pump, a check value and an exhaust value ;

20 a plurality of cycle pipes, one side of each said cycle pipe connecting  
to a foregoing joint in front of said check value and the other side of each  
said cycle pipe connecting to a rearward joint behind said check value of  
each said main pipe ; and

25 a plurality of control values, each said control value attaching on  
each said cycle pipe.

9. The auto cycled ultra pure water supply pipeline system according to  
25 claim 8, wherein said inlet value attaching on the place near said inlet  
pipe of each said main pipe.

10.The auto cycled ultra pure water supply pipeline system according to claim 8, wherein said exhaust value attaching on the place near said exit pipe of each said main pipe.

5 11.The auto cycled ultra pure water supply pipeline system according to claim 8, wherein said pump and said check value are located between said inlet value and said exhaust value of each said main pipe.

10 12.The auto cycled ultra pure water supply pipeline system according to claim 8, wherein the material of said plurality of cycle pipes is stainless steel.

13.The auto cycled ultra pure water supply pipeline system according to claim 8, wherein the diameter of said plurality of cycle pipes is 1/4 inch.

15 14.The auto cycled ultra pure water supply pipeline system according to claim 8, further comprising to attach said pump between said foregoing joint and said rearward joint.

20 15.The auto cycled ultra pure water supply pipeline system according to claim 8, further comprising when one of said plurality main pipes stop pumping, open said control value.

25 16.The auto cycled ultra pure water supply pipeline system according to claim 8, further comprising when one of said plurality main pipes start pumping, close said control value.

17. The auto cycled ultra pure water supply pipeline system according to claim 8, further comprising to open said inlet value and said exhaust value of each said main pipe, to maintain the function of each said main pipe when normal operating.

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